



VFD-B Specifications

Voltage Class		230V Class											
Model Number VFD-XXXB		007	015	022	037	055	075	110	150	185	220	300	370
Max. Applicable Motor Output (kW)		0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37
Max. Applicable Motor Output (hp)		1.0	2.0	3.0	5.0	7.5	10	15	20	25	30	40	50
Output Rating	Rated Output Capacity kVA	1.9	2.5	4.2	6.5	9.5	12.5	18.3	24.7	28.6	34.3	45.7	55.0
	Rated Output Current (A)	5.0	7.0	11	17	25	33	49	65	75	90	120	145
	Maximum Output Voltage (V)	3-Phase Proportional to Input Voltage											
	Output Frequency (Hz)	0.1~400 Hz											
	Carrier Frequency (kHz)	1-15									1-9		
Input Rating	Rated Input Current (A)	Single/3-phase			3-phase								
		11.9/ 5.7	15.3/ 7.6	22/ 15.5	20.6	26	34	50	60	75	90	110	142
	Input Current for 1-phase models when using 3-phase power	7.0	9.4	14.0	--								
	Rated Voltage/Frequency	Single/3-phase 200-240 V, 50/60Hz			3-phase 200-240V, 50/60Hz								
	Voltage Tolerance	<input type="checkbox"/> 10%(180~264 V)											
Frequency Tolerance	<input type="checkbox"/> 5%(47~63 Hz)												
Cooling Method		Natural	Fan Cooled										
Weight (kg)		2.7	3.2	4.5	6.8	8	10	13	13	13	13	36	36

Voltage Class		460V Class														
Model Number VFD-XXXB		007	015	022	037	055	075	110	150	185	220	300	370	450	550	750
Max. Applicable Motor Output (kW)		0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
Max. Applicable Motor Output (hp)		1.0	2.0	3.0	5.0	7.5	10	15	20	25	30	40	50	60	75	100
Output Rating	Rated Output Capacity (kVA)	2.3	3.2	4.2	6.5	9.9	13.7	18.3	24.4	28.9	34.3	45.7	55.6	69.3	84	114
	Rated Output Current (A)	2.7	4.2	5.5	8.5	13	18	24	32	38	45	60	73	91	110	150
	Maximum Output Voltage (V)	3-phase Proportional to Input Voltage														
	Output Frequency (Hz)	0.1~400 Hz														
	Carrier Frequency (kHz)	1-15						1-9				1-6				
Input Rating	Rated Input Current (A)	3-phase														
		3.2	4.3	5.9	11.2	14	19	25	32	39	49	60	63	90	130	160
	Rated Voltage	3-phase 380 to 480 V														
	Voltage Tolerance	<input type="checkbox"/> 10%(342~528 V)														
	Frequency Tolerance	<input type="checkbox"/> 5%(47~63 Hz)														
Cooling Method		Natural				Fan Cooled										
Weight (kg)		2.7	3.2	4.5	6.8	8	10	13	13	13	13	36	36	36	50	50

Voltage Class		575V Class														
Model Number VFD-XXXB		007	015	022	037	055	075	110	150	185	220	300	370	450	550	750
Max. Applicable Motor Output (kW)		0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
Max. Applicable Motor Output (hp)		1.0	2.0	3.0	5.0	7.5	10	15	20	25	30	40	50	60	75	100
Output Rating	Rated Output Capacity (kVA)	1.7	3.5	4.5	7.5	10	13.4	18.9	21.9	26.9	33.9	40.8	51.8	61.7	79.7	99.6
	Rated Output Current (A)	1.7	3.5	4.5	7.5	10	13.5	19	22	27	34	41	52	62	80	100
	Maximum Output Voltage (V)	3-phase Proportional to Input Voltage														
	Output Frequency (Hz)	0.1~400 Hz														
	Carrier Frequency (kHz)	1-10						1-8				1-6				
Input Rating	Rated Input Current (A)	3-phase														
		1.2	3.1	4.0	8.3	10.3	13.8	18.2	22	27.7	32	41	52	62	74	91
	Rated Voltage	3-phase 500 to 600 V														
	Voltage Tolerance	-15% ~ +10% (425~660V)														
	Frequency Tolerance	<input type="checkbox"/> 5% (47~63Hz)														
Cooling Method		Natural				Fan Cooled										
Weight (kg)		2.7	3.2	4.5	6.8	8	10	13	13	13	13	36	36	36	50	50

General Specifications			
Control Characteristics	Control System	SPWM(Sinusoidal Pulse Width Modulation) control (V/f or sensorless vector control)	
	Frequency Setting Resolution	0.01Hz	
	Output Frequency Resolution	0.01Hz	
	Torque Characteristics	Including the auto-torque, auto-slip compensation; starting torque can be 150% at 1.0Hz	
	Overload Endurance	150% of rated current for 1 minute	
	Skip Frequency	Three zones, settings range 0.1-400Hz	
	Accel/Decel Time	0.1 to 3600 seconds (4 Independent settings for Accel/Decel time)	
	Stall Prevention Level	20 to 250%, setting of rated current	
	DC Brake	Operation frequency 0.1-400.0Hz, output 0-100% rated current Start time 0-60 seconds, stop time 0-60 seconds	
	Regenerated Brake Torque	Approx. 20%(up to 125% possible with option brake resistor or brake unit externally mounted, 1-15HP brake chopper built-in)	
	V/f Pattern	Adjustable V/f pattern, 1.5 power curve, 1.7 power curve, square and cube curve	
Operating Characteristics	Frequency Setting	Keypad	Setting by <input type="text"/>
		External Signal	Potentiometer-5kW/0.5W, 0 to +10VDC; -10 to +10VDC, 4 to 20mA RS-485 interface; Multi-Function Inputs 1 to 6 (15 steps, Jog, up/down)
	Operation Setting Signal	Keypad	Set by RUN, STOP and JOG
		External Signal	2 wires/3 wires (Fwd, Rev, EF), JOG operation, RS-485 serial interface (MODBUS), process logic control
	Multi-Function Input Signal	Multi-step selection 0 to 15, Jog, accel/decel inhibit, first to forth accel/decel switches, counter, PLC operation, external Base Block (NC, NO), auxiliary motor control is invalid, ACI/AVI/AUI selections, driver reset, UP/DOWN key settings, sink/source selection and reel diameter initialization	
	Multi-Function Output Indication	AC drive operating, frequency attained, non-zero, Base Block, fault indication, local/remote indication, PLC operation indication, auxiliary motor output, driver is ready, overheat alarm, emergency stop and signal loss alarm	
	Analog Output Signal	Output frequency/current/voltage/frequency command/speed/factor	
Alarm Output Contact	Contact will be On when it malfunctions (1 Form C contact or 3 open collector outputs)		
Operation Functions	AVR, accel/decel S-Curve, over-voltage/over-current stall prevention, fault records, reverse inhibition, momentary power loss restart, DC brake, auto torque/slip compensation, auto tuning, adjustable carrier frequency, output frequency limits, parameter lock/reset, vector control, counter, PG feedback control, PID control, fan & pump control, external counter, PLC, MODBUS communication, abnormal reset, abnormal re-start, power-saving, sleep/revival function, digital frequency output, fan control, sleep/wake frequency, master/auxiliary frequency, 1st/2nd frequency source selections		
Protection Functions	Over voltage, over current, under voltage, under current, external fault, overload, ground fault, overheating, electronic thermal, IGBT short circuit		
Display Keypads	8-key, 7-segment LED with 5-digit, 8 status LEDs, master frequency, output frequency, output current, custom units, parameter values for setup and lock, faults, RUN, STOP, RESET, FWD/REV, JOG		
Environmental Conditions	Enclosure Rating	IP20	
	Pollution Degree	2	
	Installation Location	Altitude 1,000 m or lower, keep from corrosive gasses, liquid and dust	
	Ambient Temperature	-10oC to 40oC Non-Condensing and not frozen	
	Storage/Transportation Temperature	-20 oC to 60 oC	
	Ambient Humidity	Below 90% RH (non-condensing)	
	Vibration	9.80665m/s ² (1G) less than 20Hz, 5.88m/s ² (0.6G) at 20 to 50Hz	
Approvals	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		